



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/003,574

10/24/2001

Hannu Kuoksa

33047/240187

5083

826

7590

07/18/2008

ALSTON & BIRD LLP

BANK OF AMERICA PLAZA

101 SOUTH TRYON STREET, SUITE 4000

CHARLOTTE, NC 28280-4000

EXAMINER

HENDRICKSON, STUART L

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

07/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/003,574	Applicant(s) KUOKSA, HANNU	
	Examiner Stuart Hendrickson	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-12, 14, 15 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-12, 14, 15, 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/13/08</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1793

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6, 8-12, 14, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baines 5822220 taken with Mosow 5213663, Hultman et al. 4311666, Engdahl 4762590 and Bertelsen CA 1198558.

Baines teaches in columns 5 and 9 computer control of a causticization process. The computer can monitor any parameter characteristic of the system and send via feedback loop controls to other inputs to achieve a stable reaction system. The differences versus the claims is what variables are monitored. Musow teaches in columns 2 and 4 that each system can have a different variable measured, like titratable alkali or density. Hultman teaches the measurement of green density and control of white infeed- see col. 1 lines 20-25 and col. 10 lines 10-15. Concerning the addition of white liquor to the process, Engdahl teaches this in col. 3 and fig. 1. Bertelsen teaches on pgs. 15-17 measuring the TTA and conductivity, and indicates that any parameter can be measured, depending upon the system. Page 25 thereof teaches measuring the density of the green liquor, and provides a good summary of the teachings of the reference. Page 3 teaches recycling the white liquor to the green liquor for complete reaction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the infeeds as in Hultman and monitor the density or alkali in the process of Baines, using the methods of the supporting references, because doing so asserts control over the process for monitoring for optimum results. Adding white liquor is an obvious expedient to form the desired carbonate product. Note that in general, processes can be optimized (In re Boesch 205 USPQ 215). The workings of how the computer makes calculations (claims 8, 12, 14) are deemed conventional as to how computer control programs work- see Baines columns 8-9. Choosing coefficients which accurately model reality is an obvious expedient, to assure efficiency.

Art Unit: 1793

Claims 1-6, 8-12, 14, 15, 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language in claim 1 implies Jepson format, but is not proper. It is not clear what the 'base' process is and what the 'improvement' is. The first line of claim 1 should be changed back.

Applicant's arguments filed 5/16/08 have been fully considered but they are not persuasive. Previous arguments and comments are incorporated herein by reference. A motivation is given to add white liquor to green liquor. Measuring the parameters which applicant measures has been shown to be obvious, in view of the teachings of the references. The fact that no one reference uses the identical scheme as applicant does not detract from the obviousness thereof. Musow is mainly relied upon for the teaching that any parameter can be measured, so their exact scheme is of less relevance. The arguments overlook that when one controls the rate of addition of chemicals, other things such as density also are inherently controlled at the same time. That the references do not explicitly recognize this is of no moment, as long as the process steps are the same. The arguments on pg. 7 admit that white liquor and green liquor are mixed. Apparently, the argument is patentability is because which is 'added to' the other. However, 'mixing A and B' is not patentably distinct from 'adding a to B' unless unexpected results can be shown. If applicant excludes recycling, this is not claimed. If applicant demands recycling, this is not explicitly claimed. The arguments as to measuring and controlling are obvious, as above. One can measure what one wants to measure, and the system is well characterized. No patentability is seen in measuring things 'individually' - which would seem inherent in the prior art anyway, since it measures 'one thing' at a time. Previous arguments are incorporated herein, to address what has been previously and extensively argued. The arguments overlook that the references are compatible as a whole and each teaches a part of the claimed process, as well in the accumulation indicate that one can optimize the reaction in a number of different ways.

Art Unit: 1793

Any inquiry concerning this communication should be directed to examiner Hendrickson at telephone number (571) 272-1351.

/Stuart Hendrickson/
examiner Art Unit 1793